Regarding Docket ET-03-104,
Broadband Over Power lines, currently before the FCC
From: Richard F Patrick

Sirs;

I am a trained radio-television engineer, worked as a telecommunications engineer for many years, currently work in public safety, and I am a licensed amateur radio operator.

I am in total support of the Amateur Radio Relay League's comments regarding this issue… and I wish to provide these comments of my own.

I fear that BPL will:

1. Interfere with Public Safety- First Responders- radio systems that still operate in the 72 MHz to 76 MHz low band VHF regions. There are Public Safety dispatch centers and state and county emergency management centers that still operate using low band VHF due to the high reliability for their area and/or the inability to upgrade to 800 MHz (or other public safety frequencies) due to lack of funds.

2. Interfere with the reception radio signals, in the 3.5 MHz to 54 MHz bands, for amateur radio operators- who have a proven track record of assisting state and county emergency management centers by providing fail-proof communications during emergency and/or disaster like conditions, i.e. the September 11th terrorist attack of New York and Washington DC and the recent massive AC power outage in the Northeast US. Interference with amateur radio frequencies could, in a way, be considered a threat to homeland security.

3. Interfere with the reception of off the air broadcasts of television channels 2 through 4, and part of channel 5- in the 54 MHz to 72 MHz and 76 MHz to 80 MHz frequency bands.

4. Interfere with military and government assigned frequencies between 4.0 MHz to 76.0 MHz. Interference with these frequencies could pose a threat to homeland security.

5. Interfere with maritime mobile communications (to stations on land) in the case of an emergency at sea.

6. Interfere with WWV and WWVH time signals (and other important info) broadcasted by the National Institute of Standards and Technology on 2.5, 5.0, 10.0, 15.0, and 20 MHz.

7. Interfere with consumer devices that operate on (or near) 27 MHz and 49 MHz, i.e. cordless phones, wireless intercoms, etc

8. Interfere with US citizens who use the Citizens Band for their personal enjoyment (26.965 to 27.405 MHz)

I think it is also important to realize that if BPL is allowed to progress and is implemented- there will be a high chance that it

will not work properly due to interference from radio transmitters. The interference to BPL could come from amateur radio operators who are licensed to transmit high power, up to 1,500 watts using high gain antennas, which could raise the effective radiated power to over 10,000 watts ERP.
Other sources of interference to BPL could be illegal Citizens Band operators transmitting high power into high gain antennas, both fixed and mobile stations.

If BPL is allowed to progress and does not work properly (as describe above) there will undoubtedly be a lot of unhappy customers of the power company Internet access provider. I can also foresee possible court battles initiated by the 'regulated' providers of DSL (the Regional Bell Companies) vs. the unregulated providers of DSL like- BPL.

It seems to me that the Wireless LAN technology has progress a long way in the last year. Many Internet companies are providing 802.11a and 802.11b type wireless (DSL like) broadband access. I think it would be prudent for the FCC to encourage this wireless technology to provide citizens broadband Internet access instead of the disruptive and unproven interference-laden technology of BPL-, which was not allowed to progress in Japan for all of the above reasons.

Respectively submitted,
Richard F Patrick,
Amateur Radio Operator- AE7RW